

U.S. Patent Application No. 09/723,512  
Reply to Final Office Action dated March 23, 2006

PATENT  
450100-02864

**REMARKS/ARGUMENTS**

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Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

**I. STATUS OF THE CLAIMS AND FORMAL MATTERS**

Claims 1, 3, 5-8, and 10-11 are currently pending. Claims 1, 10 and 11, which are independent, are hereby amended. Claims 2, 4 and 9 have been canceled, without prejudice or disclaimer of subject matter. No new matter has been introduced. Support for this amendment is provided throughout the Specification, specifically on pages 11-20. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicant is entitled.

**II. REJECTIONS UNDER 35 U.S.C. §103(a)**

Claims 1, 3, 5-8, and 10-11 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,802,488 to Edatsune (hereinafter, merely "Edatsune") in view of U.S. Patent No. 6,353,764 to Imagawa et al. (hereinafter, merely "Imagawa")<sup>1</sup>.

Claim 1 recites, *inter alia*:

"A speech recognition apparatus disposed in a robot, comprising:  
speech recognition means for recognizing speech including a

<sup>1</sup> Applicant notes that the cited portions of Imagawa (Figures 2B, 3A; Column 11, lines 8-32 and 47-59) are not relevant and that there are no Figures 2B and 3A in Imagawa. This is believed to be a typographical error. To expedite prosecution, the cited portions are understood to be portions of Edatsune.

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dictionary in which words to be recognized in speech recognition are described;

control means for controlling said speech recognition means in accordance with a growth state of said robot, wherein said growth state is comprised of a plurality of nodes corresponding to increasing maturity levels for said robot; and

action decision means for determining and performing a predetermined action in accordance with the speech recognized by said speech recognition means and an occurrence probability of the predetermined action as determined by the growth state,

wherein said control means controls said speech recognition means such that the words described in said dictionary are weighted in accordance with the growth state of said robot and speech recognition is performed using the weighted words,

wherein coefficients for said weighted words are controlled by the growth state.” (emphasis added)

As understood by Applicant, Edatsune relates to an interactive speech recognition device that recognizes speech and produces sounds or actions in response to the recognition result. The device comprises a response content level that creates recognition data with response content that corresponds to the fetched response content level.

As understood by Applicant, Imagawa relates to a technique for operating equipment, manipulating information, or controlling environments based on people's motions, postures and conditions. A control method used to monitor a person's peripheral environment and utilizing these results to execute control.

Applicant respectfully submits that Edatsune and Imagawa, taken alone or in combination, fail to teach or suggest the features of claim 1. Specifically, Applicant submits that there is no teaching or suggestion of a speech recognition apparatus disposed in a robot wherein said control means controls said speech recognition means such that the words described in said dictionary are weighted in accordance with the growth state of said robot and speech recognition

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is performed using the weighted words, wherein coefficients for said weighted words are controlled by the growth state, as recited in claim 1.

Furthermore, the Examiner asserts this limitation is met by Edatsune's Figures 2B and 3A and Column 11, lines 8-32 and 47-59.

In working example 2, Edatsune discloses that the coefficients for recognizable phrases for the speech recognition unit are controlled by the time of day. (Column 9, lines 16-38). For example, in the morning it is more likely to hear the words "good morning" than it is to hear "good evening" and so these words are weighted accordingly. Accordingly, Edatsune does not disclose weighting words in accordance with the growth state of the robot as recited in the present claims, but rather in accordance with the time of day.

Moreover, in working example 3, Edatsune discloses that the response content for the speech synthesis unit is controlled by the level. The response content is selected from the phrases for the speech recognition unit. Edatsune does not disclose that the coefficients for recognizable phrases are controlled by the level. As evidenced by Figure 3A, Edatsune's speech recognition unit 5 does not have a relational input from the response content level generation unit 31. Rather, Edatsune discloses that the response content changes with the clock time; not the speech recognition. For example, the toy may respond with "bow-wow" on the first day after purchase, and with "good morning" on the second day of purchase. Hence, Edatsune does not meet the recited limitation "speech recognition is performed using the weighted words" as required in the present claims.

Accordingly, for at least these reasons, Edatsune and Imagawa fail to render the present invention unpatentable.

Therefore, Applicant submits that independent claim 1 is patentable.

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For reasons similar to those described above with regard to independent claim 1, independent claims 10 and 11, which recites similar features, is also believed to be allowable.

Therefore, Applicant submits that independent claims 1, 10 and 11 are patentable.

### III. DEPENDENT CLAIMS

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

### CONCLUSION

In the event the Examiner disagrees with any of statements appearing above with respect to the disclosures in the cited reference or references it is respectfully requested that the Examiner specifically indicate those portion or portions of the reference or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

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In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicant respectfully requests early passage to issue of the present application.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP  
Attorneys for Applicant

By



William S. Frommer  
Reg. No. 25,506  
(212) 588-0800

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